



## PIER Energy System Integration Program Area

### Modeling Interconnection and Anti-Islanding of DER-Endecon

**Contract #:** 500-03-011 **Project #:** 1

**Contractor:** National Renewable Energy Laboratory (NREL)

**Subcontractors:** Endecon Engineering

**Project Amount:** \$19,256

**Contractor Project Manager:** Holly Thomas (303) 275-3755

**Commission Contract Manager:** Bernard Treanton (916) 654-4512

**Status:** Cancelled

#### ***Project Description:***

The overall Purpose of this project is to develop and utilize models to understand how DER operates in distribution circuits and to support interconnection standard development in California. The effort will leverage Endecon's work with Distributed Utility Associate to support the DER simulation distribution system at DUIT site in St Ramon. Additionally Endecon will address issue with IEEE 929/UL1741 islanding test procedure for equipment connected to the grid. That issue pertains to what range of value (1.8 to 2.5) of Q should be required for test evaluation. Endecon will develop statistical models describing the mean and variance of Q. This will result in a better understanding of the conditions that promote islanding.

#### ***This project supports the following PIER Program objectives:***

- Improve energy cost/value of California's electricity.
- Improve the reliability/quality of the California's electricity.
- Improve the safety of California's electricity.

#### ***Proposed Outcome:***

1. Develop processes, standards and technology for the purpose of integrating DER in the electrical distribution system.

#### **Project Status:**

The project was cancelled effective August 30, 2004. Matching funds were unavailable and without them the project could not go forward. Original Contract was \$425,153.00. The administrative funding spent on this project was \$19,256.00. The funding transferred to new project ("Modeling Interconnection& Analysis and Planning") is \$405,897.